



The Relationship of Adversity Quotient and Leadership Styles of Private Business Leaders in Egypt

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Abstract

The aim of this study was to investigate the relationship between the Adversity Quotient Profile (AQP) and the leadership styles (Transformational and Transactional) of a group of business leaders' members and ex-members of the Egyptian Businessmen's Association (EBA) and the Egyptian Junior Business Association (EJB) in Egypt. The study utilized the descriptive correlational research type with the use of the questionnaire as the major instrument for gathering data. The data were collected from 85 business leader respondents using the following methods: Randomized sampling; the Multifactor Leadership Questionnaire (MLQ) 5X short in self-rating version in order to determine the leadership styles and the Adversity Response Profile (ARP) 8.1 to assess the Adversity Quotient of the respondents. The findings of the study were: The computed mean score of the adversity quotient of the business leaders is equal to 113.57 which is within the average range of the AQ descriptive interpretation; among the four dimensions of AQP which are control, ownership, reach and endurance (CORE), it was endurance which scored the lowest average and all the rest got average scores. The transformational leadership style was perceived as the most often adopted style, followed by the transactional leadership style. The study found that leadership styles overall scores were not significantly related to the Adversity Quotient profile of Egyptian business leaders, the AQP was found to have influence on idealized influence, and Reach of CORE dimensions was found to have influence on individualized consideration.

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1. Introduction

The current global economic downturn and political instability in many countries have raised anxiety over business organizations of all sizes and employees at all levels. These challenges have occurred due to many reasons, for instance, opening of economies to global competition, financial industry frauds that have led to the downfall of many organizations as well as countries, failure of business models on which billions of dollars were euphorically invested, terrorist actions and political turmoil, in addition to Arab spring revolutions which ousted regimes in some countries after long years of ruling. The result was a chain reaction of economic slowdown worldwide. Thus, business leaders are often forced to deal with such adverse situations. Yet, the transformational business leaders who have vision, passion, and perseverance are lacking. How these challenges are resolved is highly dependent upon the individual leader's personal qualities expressed in the style of leadership and the degree of resilience and control over the individuals' decisions and emotions which is known as adversity quotient [1].

In the search for the style of leadership that will have a positive influence on the employees of business organizations, it is clear that there are many ways of understanding leadership. For the purposes of this study, the most useful are two broad views of leadership – the traditional view of transactional leadership, involving an exchange process between leader and subordinate, and a view of transformational leadership that allows for the development and transformation of people [2,3]. As a result, leaders play a significant role in building highly aligned teams who have high levels of motivation and enthusiasm. According to the author in [4], many leaders are facing greater challenges than ever before due to increased environmental complexity and the changing nature of business organizations. The current business environment requires this innovative kind of leadership style; a style that empowers employees and raises employee performance in an effort to achieve organizational objectives and continued existence [5].

Today, AQ becomes more and more important as the daily intense of adversity rises. Most people, especially in Egypt describe ever-greater challenges - a relentless barrage of adversity, not only personal challenges but also challenges in the society as a whole and in the workplace. AQ seems to be the vital factor to success [1]. As the recognized leader in a business organization, the leader has considerable responsibilities and accountability in the organization. The position is critical to the organizational development and performance growth of such organizations, as well as the development of employees at all levels, since the leader is usually considered as the main source and the driving force that sustains the welfare of the organization [6,7,8].

The Egyptian business community and specifically business leaders and managers are not different from their peers in the other areas in the world, and are therefore exposed to these changes too. This poses quite powerful challenges to their business environment. The combined effects of such changes are powerful, bewildering, and essentially unpredictable [1]. In conclusion, there is a need to make the Egyptian business leaders aware of their leadership style in order to enhance their level of adversity quotient, thus improving their resiliency and

increasing their capacity to accept challenges and surmount adversities in life in general and the workplace in particular.

This paper has been structured as follows: The following section presents the problem statement, objectives and the significance of this study. The second section provides a theoretical construct of the AQ profile and its four CORE dimensions and leadership styles (including transformational and transactional leadership styles). The third section deals with the study hypothesis and variables. The fourth section presents the methodology of conducting this study. This includes the research design of the study, the research sample, demographic description of participants, research instrumentation, the research process, and the statistical treatment of the data. The fifth section presents the empirical results and discussion. The last two sections embrace the significant findings of the study and their discussion, while the last section deals with the conclusion and some recommendations for adversity quotient profile and leadership

2-Problem Statement

The Egyptian private business sector is in need to measure and strengthen the thoughts of its leaders and managers, especially those in high rank positions, and establish their achievements. Surpassing any adverse events in life will lead a business leader to a better way of understanding a problem, thus making more accurate decisions. In order to achieve this goal, there is a need for a measurement tool for private business organizations to evaluate the capacity of their current leaders and higher management, as well as potential recruits, to remain focused and strong in times of adversity.

Currently, there is a lack of existing knowledge in private business organizations in Egypt about a conceptual model that takes into consideration the relationship between the individual leader's personal qualities expressed in his leadership style and the degree of control over decisions and emotions. In addition, there is insufficient knowledge about the most appropriate methodology for a well robust measurement of the leader's capacity to deal with day-to- day adverse situations.

This study was conducted to investigate the relationship of leadership styles and Adversity quotient Profile (AQP) of current and previous members of the Egyptian Businessmen's Association (EBA) and the Egyptian Junior Business Association (EJB). Specifically, the study answered the following questions:

1. What is the level of AQ in terms of overall and along the four CORE dimensions of the business leader respondents in this study?
2. What is the prevalent leadership style in terms of transformational and transactional of the business leader respondents in this study?
3. How significant is the relationship between the AQ (overall and CORE dimensions) and the leadership styles (overall and sub-scales) of the business leaders respondents in the study?

3. Literature Review

This section gives the reader an overview of different contributions in literature which includes (1) Leadership and leadership style concepts, (2) Adversity quotient (AQP and CORE dimensions), (3) Transformational Leadership style, (4) Transactional leadership style (transformational and transactional).

3.1. Adversity Quotient Profile and CORE Dimensions

According to reference [8], Adversity Quotient (AQ) is the science of human resilience and it is rooted in three sciences: Cognitive psychology, psychoneuro immunology, and neurophysiology. These three building blocks come together to form AQ; the result of which is a new breakthrough, measure and a set of tools to enhance human effectiveness. A vast quantity of research studies lend support to the role AQ plays in determining the ability to triumph over obstacles. There are four dimensions of Adversity Quotient: Control, ownership, reach, and endurance (CORE). Although these dimensions may be inter-correlated, they measure many different aspects of the AQ. The sum of the four scores is the person's AQ. A discussion of these four CORE dimensions is presented.

The first dimension of CORE is Control. This dimension measures the degree of control that a person perceives of having over adverse events [8] it is a strong gauge of resilience and health (retrieved from www.peaklearning.com). Those with higher AQs simply perceive greater control over life's events than do those with lower AQs. As a result, they take more action which results in more control. Origin and Ownership. According to the author in [8], this dimension asks two questions: Who or what was the origin of adversity? And to what degree do I own the outcome of the adversity? The lower the origin score, the more likely he is to blame himself, beyond a constructive point. On the other hand, the higher the origin score, the greater the tendency to consider other external sources of the adversity and to put the individual's own role into perspective. Ownership measures the extent to which a person holds himself accountable for improving a situation. It is a strong gauge of accountability and likelihood to take action (Retrieved from www.peaklearning.com). The higher the ownership score, the more the individual owns the outcome, regardless of the cause. The lower the ownership score, the more the individual disowns the outcome, regardless of the cause. Reach. It is the perception of how far-reaching events will be. It is a strong gauge of perspective, burden and stress level (Retrieved from www.peaklearning.com). This dimension asks the question: How far will the adversity reach into other areas of my life? Lower AQ responses allow the adversity to affect other areas of the individual's life. The lower the R score, the more likely the individual will tend to regard events as catastrophic. On the other hand, the higher the R score, the more the individual may limit the reach of the problem to the event at hand. A person with high R score effectively compartmentalizes or contains the reach of the adversity, thus making him feel more empowered and less overwhelmed [8]. The author in [8] defines it as the perception of time over which good or bad events and their consequences will last or endure. It is a strong gauge of hope or optimism (Retrieved from www.peaklearning.com). It asks two related questions: How long will the adversity last? And how long will the cause of the adversity last? People with a high score on this dimension, may view success as enduring, if not permanent. Likewise, the individual may consider adversity and its causes to be fleeting and temporary. The difference is that low AQ people tend to see the adversity as a permanent state,

while high AQ people perceive the adversity as a temporary condition [8].

Many studies have included the relationship between AQ and leadership styles, for instance, a study conducted by the author in [9] investigated the association between the AQ leadership style, performance, and practices among the principals in private schools in the province of Rizal, Philippines. The findings of the study were: There was no correlation between the principals' AQ and the principals' leadership styles. Consistent with the above study, the author in [10] conducted a study to determine the leadership styles and Adversity Quotient of the elementary school principals in the Second Congressional District of Camarines Sur in Philippines. The study revealed that there was no significant relationship between Adversity Quotient and leadership styles. Furthermore, a study conducted by the author in [11], assessed the relationship between leadership style and AQ in the academic heads during school year 2008–2009 in the selected State Colleges and Universities in the National Capital Region, the study revealed that, there is no significant relationship between leadership style and over-all Adversity Quotient level and AQ Ownership, Reach, and Endurance dimensions, with the exception of leadership style and AQ Control dimensions which are significantly related.

However, most recent studies did not lend support to the relationship between AQ and leadership styles. It can be concluded that business managers and leaders should take into consideration their own implicit understanding of leadership requirements to determine the most effective leadership style and they have to constantly review their own adversity quotient profile as they are constantly exposed to different pressures both internal and external.

3.2. Leadership and Leadership Styles

The author in [12] defined leadership as a process of interaction among individuals and groups that includes a structured or restructured situation, members' expectations and perceptions. Leadership can be explained as the ability of an individual to have power that focuses on how to establish directions by adapting forces, while the author in [13] believed that leading is a process used to motivate and to influence others to work hard in order to realize and support organizational goals. On the other hand, leadership style is defined as the pattern of behaviors that leaders display during their work with and through others as the authors in [14] viewed leadership style as the pattern of interactions between leaders and subordinates. It includes controlling, directing, indeed all techniques and methods used by leaders to motivate subordinates to follow their instructions.

According to the authors in [15], there are three factors that determine the type of leadership style: Leaders' characteristics, subordinates' characteristics and the organization environment. More specifically, the personal background of leaders such as personality, knowledge, values, and experiences shape their feelings about appropriate leadership that determine their specific leadership style. However, leaders can adapt their leadership style to the perceived preferences of their subordinates [16].

Consistent with the above, AQ predicts how well individuals withstand adversity, overcome it, and foresee the possible outcome of a particular situation. An individual continually encounters adversities, it is immeasurable,

imagined or real, self-created or brought by others. Adversities bring stress to people who have their particular ways of facing it. The individual may choose or will to face it however each decision has equal and corresponding consequences. It requires a certain resilience to overcome adverse situations. It entails remaining stable and healthy physically and psychologically, even in the face of challenges. AQ comes on our natural ability to learn, adapt and change that enhances our vital ability.

Therefore, if that adopted leadership style expressed in a specific pattern of behaviors and characteristics by a certain leader could be guided and determined, this will result in a better way for that leader to adapt his leadership style to the perceived preferences of his subordinates. This will also result in a better work climate, and a stronger ability of a leader to withstand adversities when these arise and remaining stable in the face of challenges.

3.3. Transformational Leadership

1. Inspirational motivation: Leaders motivate and inspire those around them by providing meaning and challenge to their followers' work and create a clear vision to attain the target and reach up to the future level by increasing the efficiency at workplace

2. Individual Consideration: Leader treat each subordinated according to his/her particular requirements and capabilities. The leader gives the personal attention to each individual to build the healthy relationship by providing the new learning opportunities according to their interest and skills.

3. Intellectual stimulation: Leaders stimulate followers' efforts to be innovative and creative by reframing and approaching new situations to followers. The main aim of the leader to provide the free flow of ideas and imagination so that the subordinates and followers try to come up with new approaches and techniques.

4. Idealized influence -behavior: This component refers to the charismatic actions of the leader that focuses on values, beliefs and a sense of mission [17].

5. Idealized influence –attributed: It refers to whether or not the leader is seen as charismatic, powerful and confident and if the followers would like to be associated with him / her. It is the attribution followers give to their leaders.

3.4. Transactional Leadership style

1. Contingent rewards: The mutual rewards concern between Leader and subordinates in the exchange of attainment of target by optimum performance on the basis of specific benchmarks.

2. Active management- by- expectation: The leader actively participates for the correcting the followers mistakes and try to find out the reasons of variation between prescribed benchmarks and actual work performance by the subordinate.

3. Passive- management-by- expectation: The leader does not actively participate for correction; he/she wait and take the corrective action after occurrence of mistake.

A considerable number of research studies in Arab and Islamic countries recognized the importance of transformational leadership, because of its contribution to better organizational outcomes especially with increasing globalization and the moral dimension inherent in transformational leadership which is similar to the Islamic approach to leadership [18]. For example, the author in [19] conducted a study on employees from Saudi Arabia, the authors in [20] used data from employees working in the banking sector in Pakistan, and the authors in [21] applied their study on employees of a large petroleum company in Libya. Their results confirmed that transformational leadership is positively related to both job satisfaction and organizational commitment. Additionally, the authors in [22] and the authors in [23] findings based on data from Pakistan supported a strong positive impact of transformational leadership on overall performance. It can be noticed that the past literature of transformational leadership style in Egypt and Arab world implied that transformational leadership style could be useful and used as the universal leadership style because it is flexible enough to adjust with the different cultures with some of the changes in practices. However, it also shows that the country's social-cultural factors affect the behavior and preferences of the followers. These researches also shed light on leadership behaviors influenced by the personality factors of leader which could lead to a missing link between the individual's AQ and the pursued leadership style whether it is transformational or transactional.

According to the authors in [18] most of the respondents in their study see most of the business managers in Egypt as most commonly illustrating transactional styles, as they set clear goals identifying exact roles and responsibilities. They concluded that Egypt has both transactional and transformational leadership styles but most common is the transactional style, either by Contingent Reward, Management by Exception (passive and active) and most of the managers in Egypt only act when it is too late and in a laissez-faire way. The authors in [24] decided to test this theory in Egypt, an emerging market that had yet to be studied. In a questionnaire study of employees at 10 different banks, responses indicated that only three of the seven factors that were found in the ideal leadership style in Egypt corresponded with the US factors. The other four were unique to Egypt or perhaps the Middle East in general. These results indicate an inability to assume that transactional and transformational leadership will succeed in non-western cultures. The authors in [25] similarly found that these leadership styles may not be as universal as some assume.

4. Hypothesis of the Study

On the basis of the reviewed literature, it can be hypothesized that that transformational and transactional leadership styles could have an impact on the leaders' AQP. To answer problem statement number three (3), the researcher has formulated the following hypothesis:

H1. There is a significant relationship between AQP (overall and CORE dimensions) and leadership styles (overall and sub-scales) of Egyptian business leaders in private sector business organizations.

4.1. Research Variables

Independent Variable:

For the present study, leadership styles (in terms of overall and subscales of transformational and transactional) are the independent variables.

Dependent Variable:

In this study the AQP of the leaders (in terms of overall and CORE dimensions' scores) are the dependent variables.

5. Research Methodology

This section describes the general methods of research, research design of the study, the research sample and demographic description of participants, data collection instruments, the research process and the statistical treatment of the data. .

5.1. Research Design

The main purpose of this research is to explore the relationship between adversity quotient along its four CORE dimensions and leadership styles in terms of transformational (overall and 5 sub-scales) and transactional style (overall and 3 sub-scales) in the context of Egyptian private sector organizations in Egypt. The researcher used the descriptive-correlational type of research in this study. The descriptive method was used in determining the leadership styles of the business leaders and managers in terms of transformational and transactional, their adversity quotient along the four CORE dimensions: Control, ownership, reach, and endurance. The correlational method was used in determining the significance of relationship between adversity quotient and leadership styles.

5.2. Research Sample and Demographic Description of Participants

The present paper is interested in investigating AQP and leadership styles at EBA and EJB in Egypt. This is why the population studied involves all categories of business i.e. manufacturing, service, and not-for-profit organizations. The distribution of the research population is presented in Table 1:

Table 1: Distribution of the sample size of selected members of EBA and EJB

Association	Population	Sample size	%
Current member of EBA	73	19	22%
Previous member of EBA	55	17	20%
Current member of EJB	94	37	43%
Previous member of EJB	49	12	15%
Total	271	85	100%

As a result a total of 271 business leader respondents opened the link to participate in this study, but not all of them completed the survey. From those who opened the link (271), only 85 respondents completed the survey successfully, which represents 31.3 percent from the final targeted sample. From the current members of EBA, amounted to about 22%, previous members of EBA amounted to about 20%, EJB current members 43%, and EJB previous members about 15%. Table 2 illustrates the demographic description of participants.

5.3. Data Collection Method

The present study has adopted the questionnaire method for collecting primary data necessary for the study. The questionnaire list is interested in recognizing AQ and leadership styles at Egyptian business organizations. The data of the questionnaire have been collected by contacting employees through a special electronic link that was provided to business leader members in both the EBA and the EJB. The questionnaire list involved three types of questions. The first type is related to recognizing general demographic information of the participants, the second type detects AQ and the third type is related to the leadership styles of business managers and leaders at Egyptian private sector business organizations. Data collection took two months. Replies were 31.3 %, 85 lists out of the 271 distributed which can be considered as moderate level of participation. This is due to the severe political and economic turmoil that Egypt experiencing and also because of the non-supportive culture of academic researchers in Egypt in general, it was very difficult to include peer ratings or follower ratings questionnaires to this research. Most of the Egyptian factories and business organizations are facing difficult times, with frequent demonstrations and strikes.

5.4. Instrumentation

The researcher utilized two instruments to obtain data for the current study. To gather information from current and previous members of EBA and EJB concerning their leadership style, the multifactor leadership questionnaire MLQ 5x-short (Self-rating version) was employed. The Adversity Response Profile (ARP) 8.1 was used to measure the adversity quotient of current and previous members of EBA and EJB in the workplace.

5.5. Adversity Quotient Profile (ARP) 8.1: Stoltz in 2009;

The Stoltz's ARP was designed in 1997 [8] and was introduced in a new online version 8.1 in 2009. ARP is a self-rating questionnaire to measure an individual's style of responding to adverse situations. The ARP describes 30 scenarios. Each scenario represents a hypothetical event, which can be answered on a 5-point bipolar scale, (1-not responsible at all to 5-completely responsible). The following interpretation was used to classify the ARP scores:

Descriptive Interpretation	Total Scores in the Four Dimensions
High	166-200
Average	95-134
Low	0-59

The lowest possible scores for total score is 0-59 while the highest is 166-200 while the average score for ranging from 95-134 points. These scores describe the level of AQ of the respondents.

As presented below, there are four dimensions of AQ: Control, ownership, reach, and endurance. The sum of the four scores is the person's AQ. The following interpretation was used to classify the CORE Dimensions scores

Control Score

Descriptive Interpretation	Total Scores in Control Dimension
High	38-50
Average	24-37
Low	10-23

Ownership Score

Descriptive Interpretation	Total Scores in Ownership Dimension
High	38-50
Average	24-37
Low	10-23

Reach Score

Descriptive Interpretation	Total Scores in Reach Dimension
High	38-50
Average	24-37
Low	10-23

Endurance Score

Descriptive Interpretation	Total Scores in Endurance Dimension
High	38-50
Average	24-37
Low	10-23

5.6. Bass and Avolio's (1995) Multifactor Leadership Questionnaire MLQ (5x-short)

Since it was first used, the MLQ has undergone several revisions in an attempt to address concerns about its psychometric properties [26] The current version of MLQ, the MLQ Form 5X was developed based on the results

of previous research using earlier versions and confirmatory factor analyses [27]. The MLQ 5X is composed of behavioral items for the following leadership styles: Transformational, transactional, laissez-faire, and management-by-exception. For the purpose of this research, transformational leadership style is divided into idealized charismatic behaviors and attributions. Factors representing transformational leadership include idealized influence (attributed), idealized influence (behavior), inspirational motivation, individualized consideration and intellectual stimulation. Transactional leadership is represented by two factors: Contingent rewards and management-by-exception. Management-by-exception is divided into management-by-exception-Active (MBEA) and management-by-exception-passive (MBEP). As a result, the MLQ 5X contains eight factors (sub-scales).

Therefore, the revised MLQ (5X-short) in this study contains eight leadership style sub-scales of transformational and transactional leadership styles. In addition to these eight sub-scales of leadership styles, a further two factors included; overall transformational leadership style score and overall transactional leadership style score.

5.7. Research Process and Statistical Treatment of the Data

The researcher sought the permission of the secretary general of both EBA and EJB to administer the demographic data checklist, ARP, and MLQ 5x short survey to the members of the institutions. After approval of the request, the researcher personally administered and retrieved the questionnaires from the target respondents. For the electronic questionnaire, the research provided respondents with a special link to access the survey.

The gathered data were classified, encoded and summarized. Then, the researcher analyzed and interpreted the findings of the study following the sequence of the problems enumerated earlier in this study with the help of a statistician.

The following statistical tools and techniques were used to ensure the valid and systematic presentation, analysis and interpretation of data: Frequency and percentage, arithmetic mean, and to test for the significance of the relationship between AQ and leadership styles, the researcher utilized the Pearson Product Moment of Correlation Coefficient.

6. Research findings and discussion

This section presents, analyzes, and interprets the data gathered from the survey questionnaire which focused on the relationship among the Adversity Quotient and leadership styles of business leaders in private sector business organizations who are previous and current members of EBA and EJB in Egypt. The findings of the study are organized into three parts. The first part describes the adversity quotient profile of the business leader respondents as measured by the following dimensions: control, ownership, reach, and endurance and overall AQP. The second part depicts the perceived leadership styles of the business leader respondents. Finally, the third part establishes whether the adversity quotient profile overall score and CORE dimensions of the business leader respondents are significantly related to their leadership styles (overall and sub-scales).

1. What is the level of AQ in terms of overall and along the four CORE dimensions of the business leader respondents in this study?

The researcher computed the percentage from the raw data of the leaders' adversity quotient and its four CORE dimensions; control, ownership, reach, and endurance. Table 2 below presents the percentage of the leaders' adversity quotient with its four CORE dimensions.

Table2: AQP overall and CORE dimensions percentage (N= 85)

Description	N	%
AQP OVERALL		
Low	4	4.7
Average	79	92.9
High	2	2.4
CONTROL		
Low	7	8.2
Average	71	83.5
High	7	8.2
OWNERSHIP		
Low	6	7.1
Average	78	91.8
High	1	1.2
REACH		
Low	14	16.5
Average	68	80
High	3	3.5
ENDURANCE		
Low	20	23.5
Average	65	67.5
High	0	0
Total	85	100%

As shown in Table 2, the overall AQ of most respondents (92%) fall in the average level. The result implies that business leaders' respondents usually have a greater interest in every aspect of their lives and they have good potential to maintain the status quo, but they prefer to operate within their comfort zone when adversity strikes, and when facing more significant setbacks, they tend to lose confidence and may suffer fearing that further obstacles will arise. In a business environment characterized by constant change especially due to the current political events and economic recession in Egypt. Work conditions may become even more difficult and the challenge now is how business leaders can handle adversity and become stronger from it.

Of the 85 respondents, the control score was average in 71 respondents (83.5%), the largest distribution was the average ownership score with 78 respondents (91.8%). The ownership score was followed by reach average score with 68 respondents (80%). The lowest in terms of the number of respondents was the endurance score with only 65 respondents representing 76.5% of the total sample. The result implies that, respondents are having average range for all four CORE dimensions of adversity quotient.

To confirm the above results, the below Table 3 facilitates as the basis of discussion of the mean scores of the AQP and CORE dimensions.

Table 3: AQP and CORE dimensions mean scores (N= 85)

Control (C)	High (38-50)
	Average (24-37)
	Low (10-23)
	C computed mean=30.9 (Average)
	C Standard mean =41
Ownership (O)	High (38-50)
	Average (24-37)
	Low (10-23)
	O computed mean=28.67 (Average)
	O Standard mean =45
Reach(R)	High (38-50)
	Average (24-37)
	Low (10-23)
	C computed mean=28.15 (Average)
	C Standard mean =32
Endurance (E)	High (38-50)
	Average (24-37)
	Low (10-23)
	E computed mean=25.85 (Average)
	E Standard mean =36
AQP total Score	AQP computed mean=113.57 (Average)
	AQP Global Standard mean =154

The comparisons of computed and standard mean scores of control, ownership, reach, endurance and total AQP are discussed. The comparisons of computed and standard mean scores of control, ownership, reach, endurance and total AQP are discussed. The comparisons of computed and standard mean scores of control, ownership, reach, endurance and total AQP are discussed.

It can be noticed from the above Table 3 that, the Control dimension which measures the degree of control a person perceives over adverse events, the majority of the answers of the respondents belong to mid-range level of AQ Control dimension with mean score of 30.90. The mean score reflects that respondents perceive that Egyptian business leaders can be partially in control of bad events depending on the complexity of adversities they might be facing. This further implies that respondents may not easily give up in the face of adversity but may find it difficult to be in control if the situation worsens.

The Ownership dimension which measures the extent to which a person holds himself accountable for any adversity and the necessary contribution for improving the situation. The above table shows that the majority of the answers of the respondents belong to the mid-range level of the Ownership dimension, with mean score of 28.67. It shows that the respondents may believe as if they are the causes of adversities their systems are facing, but possessing a certain level of accountability. This means they have the tendency to focus on the aspect of the adversity in which they believe they are the direct causes but may not be willing to take part on the larger aspect. Thus, making their contribution for improvement of the situation is limited.

The Reach dimension which is the perception of how far the adversity reaches into other areas of life. The majority of the answers of the respondents belong to the middle range with mean score of 28.15. It shows that respondents face adversity as somewhat specific and limited. But, in some cases, adversity reaches other areas of life making bad results worse than they expected.

The Endurance dimension, the perception of time over which good or bad events and their consequences will last. It is revealed in the above table that, the majority of answers of the respondents belong to the middle range, with the lowest mean score of 25.85 among the four CORE dimensions. It implies that the respondents handle adverse events and their causes as somewhat enduring. Whenever they are confronted with major challenges, they have somewhat the capacity to do what is required to carry on. However, there may be other worse situations that make them tend to lose resolve if the outcome worsens.

The overall AQP profile was computed, the majority of the respondents fall on average with the total mean of 113.57. The result implies that Egyptian Business leaders in private sector business organizations usually have a relatively average potential in dealing with every aspect of their lives. But interpretation means that, the participants sometimes perceive these events as beyond their control and that there is little, if anything, they can do to prevent them or limit their damages.

2. What is the prevalent leadership style in terms of transformational and transactional of the business leader respondents in this study?

The tool used in this research to measure the transformational and transactional leadership styles is the MLQ. The

MLQ, a well-validated instrument, assesses the archetype of positive forms of leadership. The MLQ is not designed to encourage the labeling of a leader as transformational or transactional and precise score groupings cannot be found in it. It identifies ratings on a relative basis. The MLQ scales are independent: A person could be equally high in all of them. It is more appropriate to identify a leader or group of leaders as more transformational than transactional or vice versa. The researcher computed the mean scores of each overall and subscale in the MLQ, then ranked all subscales measured from higher to lowest. Higher means of subscales implies that the individual practices or tends to use a leadership style more than the other.

Table 5 displays the calculation of the mean scores for transformational and transactional leadership styles overall and sub-scales, the mean score of the overall transformational leadership styles scales among the 85 respondents was 15.51 while the overall transactional leadership scales averaged only 6.073. A discussion for the findings of table 4 is presented below.

Table 4: Leadership styles overall and sub-scales mean scores (N = 85)

Leadership Styles	Mean Score	Standard Mean Score
Overall Transformational Leadership Style	15.51	20
Overall Transactional Leadership Style	6.073	12
Transformational Leadership Style Sub-scales		
Intellectual Stimulation	3.24	4
Inspirational motivation	3.35	4
Idealized influence -behavior	3.11	4
Idealized influence -attributed	2.70	4
Individualized consideration	3.11	4
Transactional Leadership Style		
Contingent Reward	2.20	4
Management by exception -active	0.60	4
Management by exception -passive		

The mean scores of overall Transformational leadership style was 15.51 compared to the standard mean of 20. The mean scores of transformational leadership style sub-scales were distributed as follows; of inspirational motivation as subscale for transformational leadership style was highest, 3.35. The remaining dimensions of transformational

leadership style had the following mean scores; intellectual stimulation 3.24, idealized influence (Behavior) 3.11, individualized consideration 3.10. The lowest mean scores were idealized influence (attributed) at 2.7. This implies that, Egyptian business leaders perceive transformational leadership style as the best style to deal with the current challenges and adversity events. As transformational leadership is akin to charismatic or visionary leadership, a higher mean score of transformational leadership style as perceived by Egyptian business leaders inspire and motivate followers in ways that go beyond exchanges and rewards. Their leadership style operates especially well in close supervisory relationships, compared with more distant relationships and closer supervision is often more typical in private business settings. This close relationship may be typical of a supervisor-supervisee relationship, who are thought to be important because of their functional proximity to supervisees in an organizational context. Egyptian business leaders are thought to increase the follower's intrinsic motivation through the expression of the value and importance of the leader's goals especially in difficult times.

The mean scores for overall Transactional leadership style was 6.073 compared to the standard mean of 12, contingent reward scored highest at 3.273, management by exception (active) at 2.2, and lowest is management by exception (passive) at only 0.6. This implies that Egyptian business leaders tend to use degree of transactional leadership style based more on "exchanges" between the leader and follower, in which followers are rewarded for meeting specific goals or performance criteria. Rewards and positive reinforcement are provided or mediated by the leader. An effective transactional leader is able to recognize and reward followers' accomplishments in a timely way. However, leaders in crisis situations maintain the status quo; actively monitor the work of their subordinates, watch for deviations from rules and standards and taking corrective action to prevent mistakes. To a lesser extent, intervene only when standards are not met or when the performance is not as per the expectations. They may even use punishment as a response to unacceptable performance.

Therefore, the data has good indication that the respondents in this study tend to use the transformational leadership style more than the transactional leadership style in order to cope with adversities and workplace challenges. The results further implies that, Egyptian business leaders may exhibit varying degrees of both transformational and transactional leadership. The styles are not mutually exclusive, and some combination of both may enhance effective leadership and performance.

3. How significant is the relationship between the AQ (overall and CORE dimensions) and the leadership styles (overall and sub-scales) of the business leader respondents in the study?

To answer the problem statement 3, the aim was to determine if a correlation exists between overall AQP score and its four CORE dimensions (5 variables) with 10 leadership styles variables (2 overall scores variables + 5 transformational sub-scales variables + 3 transactional sub-scales variables). These were tested using the Pearson product moment coefficient correlation test. The findings presented in below table 5.

Table 5: Correlation between AQ (overall and CORE dimensions), and leadership styles (overall and sub-scales)

Variable	AQ		Control		Ownership		Reach		Endurance	
	<i>r</i>	<i>p-value</i>	<i>r</i>	<i>p-value</i>	<i>r</i>	<i>p-value</i>	<i>r</i>	<i>p-value</i>	<i>r</i>	<i>p-value</i>
Transformational leadership style	0.119	0.281	0.071	0.560	-0.103	0.396	0.081	0.506	0.171	0.158
Inspirational motivation	-0.181	0.196	0.186	0.087	-0.113	0.302	-0.129	0.236	0.869	0.937
Idealized influence-behavior	-0.112	0.311	0.144	0.191	-0.127	0.249	0.213	0.848	-0.293	0.791
Idealized influence-attributed	-0.085	<u>0.046*</u>	0.073	0.520	-0.486	0.672	-0.728	0.526	0.725	0.949
Individualized consideration	0.084	0.452	-0.480	0.668	-0.515	0.963	0.256	<u>0.020*</u>	0.087	0.436
Intellectual stimulation	-0.141	0.198	-0.243	0.453	0.2301	0.589	-0.457	0.710	0.141	0.249
Transactional leadership style	-0.141	0.198	-0.364	0.280	0.2701	0.295	-0.078	0.533	-0.093	0.457
Contingent Reward	0.280	0.091	-0.095	0.387	0.371	0.137	-0.101	0.358	0.009	0.933
Management By Exception (Passive)	-0.120	0.260	-0.243	0.045	0.2301	0.058	-0.045	0.710	0.141	0.249
Management By Exception (Active)	-0.091	0.410	-0.019	0.084	0.143	0.207	-0.154	0.989	-0.093	0.412

r : Pearson correlation coefficient

*significant

As shown in table 5 above, the overall AQ profile of the 85 respondents did not significantly correlate with their overall score of transformational leadership style and transactional leadership style. For the correlation between overall AQP and overall transformational leadership style (R = 0.119, P-value= 0,281), and with overall transactional leadership style (R = -0.141, P-value = 0.198). This finding was denoted by the computed P-values which were greater than the level of significance at 0.05 which denote negligible correlations. It implies that the business leader’s perception of certain leadership style whether it is transformational or transactional is not

affected by leader's level of overall AQP. It means that the respondents' perceived leadership style whether transformational or transactional can serve as determinant for generating enthusiasm, optimism, motivation and positive energy in employees in to achieve objectives. Nevertheless, this perceived style cannot be an indicator that Egyptian business leaders have the ability to handle adverse situations and workplace challenges when situations worsen. AQ is a vital piece of any effort to strengthen leaders and their ability to prosper in this demanding work environment.

Concerning the relationship between overall AQ profile and sub-scales of transformational leadership style. Pearson R results supported by corresponding P-values shows that, the- overall AQP of the 85 business leader respondents in private sector business organizations in Egypt, were all found greater than the level of significance at 0.05 indicating negligible correlation with Intellectual stimulation, Idealized influence-behavior, inspirational motivation, and individualized consideration, respectively. The results show that Egyptian business leaders convinced that transformational leaders are described to hold positive expectations for followers, believing that they can do their best. As a result, they inspire, empower, and stimulate followers to exceed normal levels of performance. They fit well in leading and working with complex work groups and organizations, where beyond seeking an inspirational leader to help guide them through an uncertain environment. But, in the time of adversity, the ability of the Egyptian business leaders to influence and motivate their employees has nothing to do with their perception of the magnitude of striking problems and has nothing to do also with how to handle this situations properly to overcome it successfully.

On the other hand, to determine the relationship between overall AQP and idealized influence attributed, the above table 6 shows that, the value of person product moment coefficient correlation R is -.0085 with a probability value of 0.0460 which is lesser than the level of significance at 0.05. Therefore, the null hypothesis that there is no significant relationship between overall AQP and idealized influence attributed of the respondents is rejected. This result indicates that, only one sub-scale of transformational leadership style is inversely correlates to overall AQP which is idealized influence -attributed. Idealized influence –attributed refers to whether or not the leader is seen as charismatic, powerful and confident and if the followers would like to be associated with him / her. It is the attribution followers give to their leaders. The inverse negative relationship between AQP and idealized influence attributed of Egyptian business leaders implies that when a business leader demonstrates a higher level of AQ, he would like to be seen as charismatic, powerful and confident, however, he feels that in order to achieve the ultimate objectives, he needs to decide and act independently without the need of referent power. The higher the AQ level of an Egyptian business leader, the lower the need for him to depend on the attribution of his followers. The manager's challenge is to figure out how to tap into the motivation of his employees to accomplish work goals. Fortunately, the manager controls the key environmental factors necessary to instill that motivation.

To test for the significance of the relationship between overall AQ profile and sub-scales of transactional leadership style, the results of correlation analysis shows that no significant relationship exists with the overall AQ of the business leader respondents in terms of the following dimensions: contingent reward ($R = 0.280$, $P\text{-value} = 0.091$), with management by exception –passive ($R = -0.120$, $P\text{-value} = 0.260$), and with management by exception –active ($R = -0.091$, $P\text{-value} = 0.410$), all were greater than the level of significance 0.05. Therefore, the null hypotheses that no significant relationship exists between overall AQP and contingent reward, between overall

AQP and management by exception (passive), and finally between overall AQP and management by exception (active) of transactional leadership style sub-scales of the respondents are accepted. The result implies that Egyptian business leaders may use degree of transactional leadership style sub-scales to achieve the ultimate organizational objectives regardless of their level of adversity quotient profile.

Table 6 shows that Correlation analysis has been performed to identify the correlation between the four CORE dimensions; control, ownership, reach, and endurance and overall transformational leadership style. According to Table 9, the computed correlation coefficient R supported by all probability values P-values, were all greater than the level of significance 0.05. This result denotes that there is no significant correlation between any of the four CORE dimensions and overall transformational leadership style. The result implies that the tendency of Egyptian business leaders to practice transformational leadership is not affected by the level of any of their CORE dimensions.

To identify the correlation between the four CORE dimensions; control, ownership, reach, and endurance and overall transactional leadership style. Table 6 shows that, in terms of control ($R = -0.364874$, $P\text{-value} = 0.2804$), ownership ($R = 0.270117$, $P\text{-value} = 0.29546$), reach ($R = -0.07865$, $P\text{-value} = 0.533444$), and finally, endurance ($R = -0.093792$, $P\text{-value} = 0.457396$). These results show that there is no significant correlation between any of the four CORE dimensions with overall transactional leadership style. The result implies that the perception and practice of transactional leadership style among Egyptian business leaders is not affected by any of their CORE dimensions.

In correlating the CORE dimensions of the 85 business leader respondents with the sub-scales of transformational leadership styles which are: inspirational motivation, idealized Influence- behavior, idealized influence- attributed, individualized consideration, and intellectual stimulation), table 6 shows that, the R-values in these data denote negligible correlations which were supported by the corresponding P-values of (0.45399, 0.58975, 0.710746, 0.249066, 0.191450, 0.249431, 0.848257, 0.791939, 0.52086, 0.672603, 0.526293, 0.949755, 0.087914, 0.302611, 0.236241, 0.937044, 0.668167, 0.963359, and 0.436319), respectively, were all found greater than the level of significance at 0.05. These results denote a negligible correlation among these variables. However, even if the overall findings show an insignificant relation between transformational leadership style sub-scales and CORE dimensions, high level of CORE dimensions, thus high AQ is still very necessary for business managers and leaders, the author in [8] demonstrates the importance of the relationship between AQ and leadership style as follows. Leaders might be brilliant at creating a compelling vision, strategizing, and inspiring others. However, what use are these skills if a leader cannot persevere through adversity? They would all become abilities useful in a context without adversity and only useful as long as conditions are perfect and smooth. Leaders must be able to see challenges worthy of great effort, creativity and resources.

On the other hand, strong correlation was noted in the relationship between Reach of CORE dimension and individualized consideration (one sub-scale of transformational leadership style). This finding was gleaned from the computed R value of 0.256108 since the corresponding computed P-value is 0.02021, which is far lesser than the level of significance at 0.05. This result infers a strong positive correlation between reach CORE dimension and individualized consideration. Reach of CORE dimensions refers to the perceived ability of a leader to limit the

extent of bad situations not to reach into other areas of his life, while Individualized consideration refers to the degree to which the leader attends to each follower's needs, acts as a mentor or coach to the follower, and listens to the follower's concerns. This behavior can include the following actions: discussing and empathizing with the needs of individual employees, making interpersonal connections with employees, showing genuine compassion, and encouraging ongoing professional development and personal growth of employees. This result presents the respondents' perceived capacity to limit the extent of the effects brought about by any adverse challenge in a manner that they won't be affected further in other areas of their lives can be determined by the inner capacity of a leader to act as personal mentor or coach for his followers while having the position. This is also consistent with a study by the authors in [28] examining the relationship between transformational and transactional leadership styles, leader-member-exchange (LMX), organizational climate and job burnout. The authors in [28] studied 127 employees of a service organization in Pune. They concluded that transformational leadership and LMX are good predictors of organizational climate and help reduce job burnout. Leaders will keep leading through the turmoil with innovative and charismatic styles, savior roles, cementing traits and winning practices.

Finally, concerning the significance of the relationship between CORE dimensions and sub-scales of transactional leadership style, table 6 shows that, the Pearson R results supported by corresponding P-values denote that, the CORE dimensions of the 85 business leader respondents in private sector business organizations in Egypt, were all found greater than the level of significance at 0.05 indicating negligible correlation with contingent reward, management by exception (passive), and management by exception (active), respectively. This result denotes that, there is no significant correlation between any of the four CORE dimensions and any of the sub-scales of transactional leadership style. The result implies that, the tendency of Egyptian business leaders to practice transactional leadership style is not determinant of their level of CORE dimensions.

7. Summary of findings, conclusion and recommendations

This section combines the highlights of the significant findings of the study, conclusions, the recommendations, and limitations presented by the researcher.

7.1. Summary of Findings

The following are the significant findings of the study:

1. On the demographic profile of the respondents in terms of age:

Out of 85 business leader respondents, age groups were split as follows: 34 (40%) belong to the 25-39 age group, 47 (55.3%) are 40-55, and only four respondents (4.7%) are above 55 years old.

2. On the demographic profile of the respondents in terms of tenure (length of service as manager):

For the tenure or length of service as a manager in the organization, only 22 (25.9%) have between three and five years of experience, 27 (31.8%) have six to ten years of experience, and 36 (42.4%) have more than 10 years' experience. This means that two thirds of the respondents (63%) tend to fall in the range of six years of

experience and above practicing managerial skills.

3. On the demographic profile of the respondents in terms of highest level of education attained:

Of the 85 business leader respondents, education levels were split evenly between BA degree 35 (41.2%), and MBA degree 35 (41.2%), while 15 (17.6%) have a doctoral degree. This finding indicates that, more than half (59%) of the respondents have higher education levels ranging between master degrees and doctoral degrees. This implies that a high educational level is essential for business managers in Egyptian private business organizations in order to be assigned higher-ranking positions.

4. On the respondent rating in terms of overall AQP:

The majority of the respondents (92%) belong to the average range of AQ level with a weighted mean of 113.57 which is below the standard mean of 154. This indicates a fairly average capacity of navigating life events however they may struggle when confronted by larger setbacks and when bad events worsen.

5. On the respondent rating in terms of control CORE dimension:

Of the 85 respondents, the control score was average for 71 respondents (83.5%) with a mean score of 30.90. This indicates that Egyptian business leaders have an average level of controlling difficulties depending on the complexity of adversities they might be facing.

6. On the respondent rating in terms of ownership CORE dimension:

The largest distribution among all CORE dimensions of the 85 respondents was the average ownership score in 78 respondents (91.8%) with a weighted mean score of 28.67. It indicates that they have the tendency to focus on the aspect of the adversity in which they believe they are the direct cause, but may not be willing to take part on the larger aspect. Thus, making their contribution for improvement of the situation limited.

7. On the respondent rating in terms of reach CORE dimension:

Of the 85 business leader respondents, the reach CORE dimension was average in 68 respondents (80%) with weighted mean score 28.15. It indicates that respondents face adversity as somewhat specific and limited. However, in larger setbacks, adversity reaches other areas of their life making bad results worse than they expected.

8. On the respondent rating in terms of endurance CORE dimension:

The lowest in terms of the number of respondents was the endurance average score in only 65 respondents representing 76.5% of the total sample (85 business leaders). The weighted mean score for the endurance CORE dimension was 25.85 which was also the lowest average score in all CORE dimensions of the respondents in this study. It indicates that respondents handle the adverse events and their causes as somewhat enduring. When severe adversities strike, they tend to weaken and lose resolve if the outcome of these events worsens.

9. On the respondent rating in terms of leadership styles:

The computed mean scores of overall transformational leadership style was 15.51 compared to the standard mean of 20, while the mean score of overall transactional leadership scales averaged only 6.07. This indicates that the data has a good indication that the respondents in this study tend to use more transformational leadership style than transactional leadership styles in order to cope with adversities and workplace challenges. The finding further implies that, Egyptian business leaders may exhibit varying degrees of both transformational and transactional leadership. The styles are not mutually exclusive, and some combination of both may enhance effective leadership and performance.

10. On the significant relationship between overall leadership styles (transformational and transactional) and the personal demographic profile of the respondents:

The study finds no significant relationship exists between the respondents' overall scores of transformational and transactional leadership styles and the personal demographic profile in terms of age, tenure, and highest level of education attained.

11. On the significant relationship between sub-scales of leadership styles (transformational and transactional) and personal demographic profile of the respondents:

The study finds no significant relationships exists between any of the respondents' leadership styles sub-scales (transformational and transactional) and the personal demographic profile in terms of age, tenure, and highest level of education attained.

12. On the significant relationship between overall AQP and the personal demographic profile in terms of age, tenure, and highest level of education attained.

The study finds no significant relationship exists between overall AQ and the personal demographic profile of the respondents in terms of age, tenure, and highest level of education attained.

13. On the significant relationship between CORE dimensions of the AQ and the personal demographic profile in terms of age, tenure, and highest level of education attained.

The study finds no significant relationship between ownership, reach and endurance of CORE dimensions and any of the respondents' demographic profile variables namely; age, tenure, and highest education attained, however, the study finds a significant relationship exists between *control* and highest level of education attained when tested using the *Pearson product moment correlation coefficient*. This finding shows that Egyptian business leaders have self-confidence and a positive self-image, developing communication skills, and the capacity to manage strong feelings and impulses in difficult times, given their high level of knowledge and education. To overcome the challenges of an ever-changing environment, it then becomes important for business leaders to be highly educated and possess the necessary skills to be successful despite adversities.

14. On the significant relationship between overall AQP and overall score of leadership styles (transformational and transactional)

The study finds no significant relationship exists between overall AQP and any of the respondents' leadership styles (transformational and transactional) overall scores. It indicates that the respondents' perceived leadership style whether transformational or transactional can be determinant for generating enthusiasm, optimism, motivation and positive energy in employees when achieving objectives. Nevertheless, this perceived style cannot be an indicator that Egyptian business leaders have the ability to handle adverse situations and work place challenges in turbulent times. AQ is a vital piece of any effort to strengthen leaders and their ability to prosper in this demanding work environment.

15. On the significant relationship between overall AQP and sub-scales of transformational leadership style:

The researcher found a negligible correlation between overall AQP with sub-scales of transformational leadership style in terms of intellectual stimulation, idealized influence-behavior, inspirational motivation, and individualized consideration. The study also found a significant relationship between overall AQP and idealized influence attributed (one sub-scale of transformational leadership style) of the respondents. This indicates that only one sub-scale of transformational leadership style inversely correlates to overall AQP, this is idealized influence -attributed. The inverse negative correlation between AQP and idealized influence attributed of Egyptian business leaders implies that when a business leader demonstrates a higher level of AQ, he would like to be seen as charismatic, powerful and confident, however, he feels that in order to achieve his objectives, he needs to decide and act independently without the need of referent power. The higher the AQ level of an Egyptian business leader, the less the need for him to depend on the attribution of his followers. The manager's challenge is to figure out how to tap into the motivation of his employees to accomplish the goals. Fortunately, the manager controls the key environmental factors necessary to instill that motivation.

16. On the significant relationship between overall AQP and sub-scales of transactional leadership style:

The study finds no significant relationship exists between overall AQP and sub-scales of transactional leadership style in terms of contingent reward, management by exception (passive), and management by exception (active) of the respondents. This result indicates that Egyptian business leaders may use a degree of transactional leadership style sub-scales to achieve the organizational objectives regardless of their level of AQP.

17. On the significant relationship between CORE dimensions of the AQ and overall transformational leadership style:

The study finds no significant correlation between any of the four CORE dimensions and overall transformational leadership style. The result implies that the tendency of Egyptian business leaders to practice transformational leadership is not affected by their level of any of their CORE dimensions.

18. On the Significant Relationship between CORE dimensions of the Adversity Quotient and Overall Transactional Leadership Style.

The study finds no significant correlation exists between any of the four CORE dimensions with overall transactional leadership style. The result implies that, the perception and practice of transactional leadership style among Egyptian business leaders is not affected by any of their CORE dimensions.

19. On the significant relationship between CORE dimensions of the AQ and sub-scales of transformational leadership style.

The study finds a significant relationship exists between the reach CORE dimension and individualized consideration (one sub-scale of transformational leadership style). All other dimensions of CORE in terms of control, ownership and endurance were not significantly correlated to the remaining sub-scales of transformational leadership style in terms of intellectual stimulation, idealized influence-attributed, idealized influence-behaviour and inspirational motivation. However, even if the overall findings show an insignificant relation between transformational leadership style sub-scales and CORE dimensions, high AQ is still very necessary for business managers and leaders. The positive correlation between the reach CORE dimension and individualized consideration indicates that the respondents' perceived capacity to limit the extent of the effects brought about by any adverse challenge in a manner that they won't be affected further in other areas of their lives can be determined by the inner capacity of a leader to act as personal mentor or coach for his followers.

20. On the significant relationship between CORE dimensions of the AQ and sub-scales of transactional leadership style.

The study found no significant relationship between any of the CORE dimensions of the AQ and any of the sub-scales of the transactional leadership styles in terms of contingent reward, management by exception (passive), and management by exception (active). The result indicates that the tendency of Egyptian business leaders to practice the transactional leadership style is not determinant of their level of CORE dimensions.

7.2. Conclusions

The significant findings of the study provided a basis for the following conclusions:

1. The business leader respondents are mostly male who occupy higher ranking positions, middle aged between mid-thirties and fifty years of age. They have pursued post graduate studies, and most of them have around seven years of experience in managerial positions.
2. The business leader respondents have an average level of AQ which indicates that they usually have a greater interest in every aspect of their lives and a good potential to maintain the status quo, however they prefer to operate within their comfort zone and when facing adversity and significant setbacks, they tend to lose confidence and may fear that further obstacles will arise.

3. The respondents in this study tend to use more the transformational leadership style rather than the transactional leadership style in order to cope with adversities and workplace challenges. Egyptian business leaders may exhibit varying degrees of both transformational and transactional leadership. The styles are not mutually exclusive, and some combination of both styles may enhance effective leadership and performance.
4. Age, tenure, and highest level of education attained are not significant factors in differentiating the leadership styles (transformational or transactional) overall and the sub-scales of the business leader respondents.
5. Age, tenure, and highest level of education attained are not significant determinants of the AQP level (and its four CORE dimensions) of the business leader respondents.
6. Age, tenure, and highest level of education attained are not significant factors in determining the levels of ownership, reach and endurance CORE dimensions of the business leader respondents.
7. The highest level of education attained is a significant factor in differentiating the level of the control dimension of the business leader respondents.
8. Leadership styles (transformational and transactional) overall scores are not significant factors in differentiating the AQP level of the business leader respondents.
9. Intellectual stimulation, idealized influence-behavior, inspirational motivation, and individualized consideration sub-scales of transformational leadership style are not significant factors in differentiating the AQP level of the business leader respondents.
10. Idealized influence-attributed which is the only one of the sub-scales of transformational leadership style is a significant factor in differentiating the AQP level of the business leader respondents.
11. The transactional leadership style sub-scales are not significant factors in determining the level of AQP of the business leader respondents.
12. Individualized consideration (sub-scale of transformational leadership style) is a significant factor in differentiating the reach level of CORE dimensions.
13. Transactional leadership style sub-scales are not significant factors in determining the level of any of the CORE dimensions of the business leader respondents.

7.3. Recommendations

In light of the study's significant findings and conclusions the following recommendations are offered:

1. Private sector business organizations should review their processes for promoting and recruiting employees especially for higher ranking positions and should look into the possibility of integrating AQ as one of the

qualifications criteria.

2. Since AQ can be learned and improved, and due to the fact that business leaders and managers are constantly exposed to different types of pressure both internal and external, they should be encouraged to constantly review their own AQP and learn how to improve it through self-improvement activities, attending seminars, reading books, and practicing sports.
3. Human resource departments in every business organization should look for formal training in business adversity to enhance harmonious working relationships among people of the same level in the organizational structure thereby avoiding professional jealousy.
4. Business managers and leaders should also learn how to be aware of their own leadership style. They should take into consideration their personal attributes as well as their own understanding of leadership to determine the most effective leadership style that fits with their personality characteristics, values, beliefs, and skills.
5. Since the respondents in this study tend to practice the transformational type of leadership more than the transactional style, they should learn that both leadership styles are needed for guiding an organization to success. Transactional leaders handle all the details that come together to build a strong reputation in the marketplace, while keeping employees productive on the frontline. Transactional leaders provide distinct advantages through their abilities to address small operational details quickly. Transformational and transactional leadership styles are not mutually exclusive and both of them can be effective in business organizations depending on the situation. Business leaders must keep on exploring opportunities and finding conditions that will facilitate the success of achieving the ultimate objectives of their organizations.
6. The study revealed that the respondent's perceived control over adversity is related to educational level. This calls for AQ training to enhance their knowledge and instill individual adversity awareness, thereby, making them more conscious to deal with adversity which is part of their daily life. The awareness of their AQ level will create a powerful factor in inspiring others to understand their drawbacks and turning them into opportunities.
7. The study can be considered of great importance for the students of business administration in colleges, universities, and business schools who may head business organizations in the private sector business organizations after their studies and become leaders in the near future. It may provide them with a basis for enhancing their knowledge and future practices through learning of what is required for a business leader with higher AQ and appropriate leadership style.
8. The development and validation of an AQ questionnaire in future research should be based on the specific characteristics of the Egyptian culture in a manner that could be easily understood and used within the frame of the Egyptian traditions and culture.
9. It is recommended that the present study be reviewed, criticized, and even replicated using more varied

samples, variables, and other survey and measurement techniques to provide an opportunity for comparison of results.

10. The results of this study may be shared with business organizations in the public sector for possible follow-up studies.

7.4. Limitations of the study

The study was conducted to determine the relationship between AQ and leadership styles of Egyptian business leaders in EBA and EJB. Although their head offices are in Cairo, their members originate from all Egyptian governorates. All members belong to private sector organizations covering all sectors of different businesses in Egypt. This represented the first limitation of this study as the generalization of the research result to other countries and to the business public sector may be difficult because of the research scope only focuses on private sector business organizations in Egypt due to the political and economic adversities in Egypt which called for such study.

The second limitation is that, the present study confined the researcher to measure the AQ level of business leaders only with respect to certain leadership styles. Activities in various co-curricular activities also help in determining the AQ level of business leaders such as leader's effectiveness, performance, satisfaction, turnover and more importantly peer -rating and employee -rating. However the researcher did not include these variables due to the fact that, it would not have been possible to collect such information because of the wide-spread culture in Egypt of not supporting academic researches especially with this type of information. Therefore, the researcher acknowledges that given the topic selection, the researcher is looking for relationships to support the hypotheses of the study.

Finally, the researcher found no previous studies conducted neither in Egypt nor abroad concerning the relationship of business leaders' AQ and leadership styles in terms of transformational and transactional. However, the researcher has done extensive literature review in order to be objective and accurate.

References:

- [1] K. Bekhet. "The relationship between adversity quotient and leadership styles of business leaders in Egypt." DBA dissertation, Maastricht School of Management, Maastricht, 2015.
- [2] B.M. Bass and B.J. Avolio. "Developing Transformational Leadership and Beyond." *Journal of European Industrial Training*, vol. 14, no. 5, pp. 21-27, 1990.
- [3] M. Meyer and E. Botha. *Organization Development and Transformation in South Africa*. Durban: Butterworths, 2000.
- [4] A. Riaz and M. Haider. "Role of transformational and transactional leadership on job satisfaction and career satisfaction" *Business and Economic Horizons*, vol. 1, no. 1, pp. 29-38, 2010.

- [5] J.P. Kotter. "The smarts that count" *HR Magazine*, vol. 42, no. 11, pp. 72-78, 1988.
- [6] W. M. Williams. "The relationship between principal response to adversity and student achievement." PhD thesis, Cardinal Stritch University, Wisconsin, 2003.
- [7] S.J. Rosenholtz. *Teacher's workplace: The social organization of schools*. White Plains, NY: Lagman, 1989.
- [8] P.G. Stoltz. *Adversity quotient: Turning obstacles into opportunities*. Ontario, Canada: Wiley, 1997.
- [9] L.D. Canivel. "Principals' adversity quotient: Styles, performance and practices." M.A. thesis, University of the Philippines, Philippines, 2010.
- [10] J.N. Napire. "Adversity Quotient and Leadership Style in Relation to the Demographic Profile of the Elementary School Principals in the Second Congressional District of Camarines Sur." M.A. thesis, University of Northeastern Philippines Iriga City, Philippines, 2013.
- [11] M. Ferrer. "Relationship of personal characteristics, leadership styles, and job satisfaction to adversity quotient of academic heads of selected colleges and universities in the national capital region." Master's thesis, University of the Philippines, Philippines, 2009.
- [12] B. M. Bass. "The future of leadership in learning organizations" *Journal of Leadership & Organizational Studies*, vol. 7, no. 3, pp. 18-40, 2000.
- [13] J.R. Schermerhorn, J.G. Hunt and R.N. Osborn. *Organizational Behavior*. 9th ed., New York: Wiley, 2009.
- [14] J. E. Miller, K. E. Walker, K. E. Drummond and M. Hoboken. *Supervision in the Hospitality Industry*. 4th ed., Hoboken: John Wiley and Sons, 2002.
- [15] R.R. Kavanaugh and J.D. Ninemeier. *Supervision in the Hospitality Industry*. 3rd ed., Michigan: The Educational Institute of the American Hotel and Lodging Association, 2001.
- [16] R.D. Wood. "Leadership behaviors of academic college deans in Mississippi's eight state-supported universities." PhD thesis, University of Southern Mississippi, Hattiesburg, 2004.
- [17] J. Antonakis, A.T. Cianciolo, and R.J. Sternberg. *The nature of leadership*. Thousand Oaks, CA: Sage, 2004.
- [18] S. Jones and M.M. Saad. "We get the leaders we deserve: transactional and transformational leadership styles in Egypt" *Maastricht School of Management*, Draft Working Paper No. 2013/32, 2013.
- [19] A. Elkhtany. "The Impact of Transformational Leadership in Achieving Job Satisfaction: Applied Study (Saudi Arabian Airlines)" *Business Studies and Research*, vol. 30, no. 2, pp. 607-654, 2010.

- [20] F. Bushra, A. Usman and A. Naveed. "Effect of Transformational Leadership on Employees' Job Satisfaction and Organizational Commitment in Banking Sector of Lahore (Pakistan)" *International Journal of Business and Social Science*, vol. 2, no. 18, pp. 261-267, 2011.
- [21] I. Zahari and A. Shurbagi. "The Effect of Organizational Culture and the Relationship between Transformational Leadership and Job Satisfaction in Petroleum Sector of Libya" *International Business Research*, vol. 5, no. 9, pp. 89-97, 2012.
- [22] S. Rehman, A. Shareef, A. Mahmood and A. Ishaque. "Perceived Leadership Styles and Organizational Commitment" *Interdisciplinary Journal of Contemporary Research in Business*, vol. 4, no. 1, pp. 616-626, 2012.
- [23] N. Ali, M. Babar and S. Bangash. "Relationship between Leadership Styles and Organizational Commitment amongst Medical Representatives of National and Multinational Pharmaceuticals Companies, Pakistan (An empirical study)" *Interdisciplinary Journal of Contemporary Research in Business*, vol. 2, no. 10, pp. 524-529, 2011.
- [24] A.I. Shalin and P.L. Wright. "Leadership in context of culture: An Egyptian perspective" *Leadership and Organizational Development Journal*, vol. 25, no. 6, pp. 499-511, 2004.
- [25] G. Casimir, D.A. Waldman, T. Bartram, T. and S. Yang. "Trust and the Relationship between Leadership and Follower Performance: Opening the Black Box in Australia and China" *Journal of Leadership & Organizational Studies*, vol. 12, no. 3, pp. 68-84, 2006.
- [26] B.J. Avolio, B.M. Bass and D.I. Jung. *MLQ Multifactor Leadership Questionnaire: technical report*. Redwood City, CA: Mindgarden, 1995.
- [27] B.J. Avolio, B.M. Bass and D.I. Jung. "Re-examining the components of transformational and transactional leadership using the Multifactor Leadership Questionnaire" *Journal of Occupational and Organizational Psychology*, vol. 72, pp. 441 – 462, 1999.
- [28] D.K.K Vaishali, and M.P. Kumar. "Transformational and Transactional Leadership Styles as Predictors of LMX: A Path Analytic Assessment of Organizational Commitment Leading to Job Burnout" *Abhigyan*, vol. 21, no. 3, pp. 9-19, 2003.